# ENGINEERING ALUMNI NEWS

UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE AND ENGINEERING
VOLUME 17 • NUMBER 2 • MAY, 1971

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1T1 • 2T1 • 3T1 • 4T6

# *SPRING REUNION 1971*

COME TO

## NEW COLLEGE

ON

## Friday, June 4th

•

RECEPTION
6.30 p.m
DINNER
7.30 p.m.

•

RETIRING PROFESSORS
TO BE
HONOURED

G. ROSS LORD
PHILIP B. HUGHES

•

DEAN HAM TO ADDRESS
REUNION ON
SCHOOL AND THE
UNIVERSITY COMMUNITY

SCROLLS WILL BE PRESENTED TO THE
REUNION T YEARS
1T1 • 2T1 • 3T1 • 4T6

CLASS CHAIRMEN

•

*Class of 1T1*
HARRY PULLAN
R. K. NORTHEY

•

*Class of 2T1*
M. C. STAFFORD

•

*Class of 3T1*
JOHN FRANKLIN
E. J. SHEARE

•

*Class of 4T6*
M. R. DAVIDSON

**BE SURE TO MAKE RESERVATIONS THROUGH YOUR CLASS ORGANIZATION OR ALUMNI HOUSE**

**Engineering Alumni News**
PUBLISHED BY
THE ENGINEERING ALUMNI ASS'N
OF THE
UNIVERSITY OF TORONTO
*President* ........ *F. T. Gerson*
*Secretary* ........ *P. B. Walters*
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*Chairman — J. G. Cowan*
ALUMNI HOUSE, UNIVERSITY OF TORONTO
TORONTO 5 - ONTARIO

## MORE ELECTIVE FREEDOM IN ENGINEERING CURRICULUM

A new curricular structure which Dean James A. Ham said would give students of Applied Science and Engineering "a greatly increased degree of elective freedom" was approved by the Senate in March.

Beginning with the 1971-72 session, all courses, except for those in the Faculty of Arts and Science which students may elect to include in their programs, will be one term in duration. Evaluation and promotion of students will take place at the end of each term, except that first year students, in general, will be evaluated on their work in the first two terms.

The first term will begin immediately after Labour Day and end before Christmas and will contain 10 week-days for pre-examination study and examinations. Over-all, the normal length of the term will be about 15 weeks. The second term will begin after January 1, end not later than April 30, and will be 16 weeks in duration, with 10 week-days for pre-examination study and examinations, and there will be no mid-term study week.

A maximum of six courses, with a total weight of 48 units, may be prescribed in any one term, although, as a transitional measure in 1971-72 only, seven courses have been prescribed in some programs. All first year students must take the regular 48-unit load in first and second terms. Students in third or higher terms may, with approval of their departments, reduce the load to 40 units or increase their load to a maximum of 60 units.

Elective choice in technical subjects will be introduced in the second term and, in most programs, be increased in latitude in the higher terms, becoming very wide in the seventh and eighth.

The Faculty's recommendation to Senate described "open" electives and non-technical electives as follows:

"In each of terms one to four, the student must include in his program a non-technical elective having as its central theme the study of man as an individual or man as a social being. This course may be selected either from a group of such courses which are offered within the Faculty of Applied Science by teaching departments of the Faculty of Arts and Science, or from a specified list of regular course offerings in the Faculty of Arts and Science.

"In each of terms five to eight, the student must include in his course an 'open' elective, which may be a selection of any of the courses described above, or any degree credit course listed in a University of Toronto calendar, other than those offered by the Faculty of Applied Science and Engineering".

The new curricular structure is the culmination of the work of the Curriculum Task Force and the Faculty's Standing Committee on Curriculum during the past three years. A report to the Faculty Council, the Senate was told, "was critical of the existing curriculum format pointing particularly to its rigidity in respect to program prescriptions, its rigidity in respect to student load, and the diffusion of the effort of the student over the large number of courses which he was expected to take simultaneously".

The Task Force was set up to find means of increasing the elective content of undergraduate engineering programs, concentrating on fewer courses at one time, and permitting students to proceed to the degree at variable rates. The Committee felt that these aims could best be achieved by a term system in which all courses would be of one term in duration.

## CLASS OF 5T6 TAKES OFF

*Paul Walters has written this open letter to the Class of 5T6*

It is hard to believe fifteen years have passed since we graduated. Everyone remembers our Decennial Reunion in 1966. There was a 30% turnout to the dinner and dance. Sunshine sketches of Skule Nite were presented by Bob Hill as Stacey. Well, the committee is at it again.

Under Bill Pollock and his committee of Ross Lawrence and Fred Black our "Fifteen Year Reunion" is all planned for June 19, 1971.

This outstanding affair will be held at the Mississauga Golf & Country Club. Early indications are that it will be even better attended than the Decennial Reunion. We are planning to ensure that it will be bigger and better.

Tickets are twenty five dollars per couple. There are a limited number available, so contact your Club Chairman as soon as possible.

The ticket includes:

Free parking.
Pre-dinner cocktails.
Dinner with all the trimmings; including wine.
Dancing to a first-class group.
Skule Nite Highlights, featuring Jim Vasoff, and a cast of thousands.

Remember we announced the "5T6 Award of Merit" at our last reunion? The Class Project Committee under Don Hewson with Jim Burgess and Ken Griffin, as members have hammered out the following details for presentation to Dr. Jim Ham, Dean of the Faculty. The award is $100.00 and includes a suitable memento, to be presented annually. Students registered in second year Engineering who successfully completed first year are eligible. The award is based on the student's records and achievements in first year. Of primary importance is the student's academic excellence. (Student shall have obtained honours standing in the first year examinations.) Consideration will also be given to extra curricular activities of a Faculty, University or Community nature and the student's personality, leadership and character.

The award will be presented to the successful candidate at a reunion of the 5T6 Engineering Class to be held in the spring of each year.

Money for the scholarship will be donated by members of the 5T6 Engineering Class. Annual donation of $10.00 per member will be requested until such time as the fund becomes self-sufficient. Donations will be made payable to "5T6 Award of Merit" and forwarded to our Treasurer, Bill Wallace.

The Class drew heavily on the experience of Jim Burgess and the Civils, who established the "5T6 Civils Scholarship" in 1963.

The other members of the Executive who carry out the excellent work of 5T6 are Fred Haywood the erudite Secretary and recorder of activities; Bill Wallace, Treasurer and custodian of the 5T6 Award Fund; Jim Bacon, Chemical Chairman, Dave Sutton, Electrical Chairman, and our new member Don Chambers acting for Don McLean, Engineering Physics Chairman, while he sojourns in Vancouver.

See you June 19th.

## SPRING REUNION

1T1 4T6

### CAMPUS-WIDE PROGRAM

2T1 3T1

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**FRIDAY, JUNE 4th**
REUNION DINNER — NEW COLLEGE
6.30 p.m. — $8.00 per person

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**SATURDAY, JUNE 5th**

**REGISTRATION** — Hart House
11.30 a.m. to 12.30 p.m.

**CAMPUS BUS TOURS**
From 11.30 a.m. — every half hour
Mechanical and Galbraith Building Tours
Structural Lab • Energy Conversion Lab
Computer Facilities

**LUNCHEON** — Great Hall — Hart House
12 noon to 1.00 p.m.

**RECEPTION** — Home of President Claude T. Bissell
3.45 p.m. to 4.30 p.m.
(BUS SERVICE FROM HART HOUSE)

# U. of T. To Award Honorary Degrees To Engineering Alumni

FRANCIS HERBERT KORTRIGHT

The Senate of the University of Toronto has announced the Chancellor will confer honorary degrees on two U. of T. Graduates of Engineering. Mr. A. W. F. McQueen will receive an Honorary Doctor of Engineering degree in the Spring Convocation and Mr. F. H. Kortright, an Honorary Doctor of Laws degree in the Fall Convocation. On behalf of the Alumni we congratulate these two fine Schoolmen.

ANDREW WILLIAM FRASER McQUEEN

Francis Herbert Kortright was born in St. Kitts, B.W.I., on November 26, 1887. After secondary school he entered the University of Toronto and graduated from S.P.S. in Civil Engineering in 1908. Following graduation he practiced Civil Engineering in Puerto Rico and St. Kitts, specializing in railroad and harbour installations.

As an Engineer in Ontario he participated in a number of significant projects including acting as chief engineer in charge of the paving of the Lakeshore Highway, Number 2, from Toronto to Hamilton. It is interesting that Mr. Kortright recommended a road width of 14 feet, but was forced to compromise at 12 feet with the Province which wanted a 10 foot width.

In 1916 he joined the Canadian Armed Forces and was on active service until the end of the war in 1918, attaining the rank of Major.

Following his war service, he did Efficiency Engineering work in Toronto, and later became General Manager of Willards Chocolate Co. Ltd. In 1933 he became General Manager of A. R. Clarke and Co. which he managed until his retirement in 1965.

As a young man Mr. Kortright had a keen interest in hunting and fishing which soon led him to a much wider appreciation of wild life and eventually to conservation in its widest sense. This caused him to write and to publish in 1942 "The Ducks, Geese and Swans of North America". This is not only the standard but the classic in its field and has now been reprinted eleven times. All profits from this book have been devoted to the conservation of wild life. In recognition of the excellence of this work, he was awarded in 1947 the Brewster Medal of the American Ornithologist's Union, the first Canadian to be so honored.

In 1948, with the financial help of some friends, who shared his interest in and concern for natural resources, he founded the Canadian National Sportsmen's Show, the largest show of its type in Canada, and indeed the World. The show, featuring activities and materials associated with outdoor recreation and conservation, has as a frank aim the raising of money with which the cause of conservation can be advanced. In this it has been successful and in twenty four years of operation more than two and one half million dollars have been provided for projects ranging all the way from the provision of conservation literature to elementary schools, to support of research on insect hormones (one of the possible alternatives to chemical control). In 1953 a major project was initiated with the founding of the Conservation Council of Ontario. This Council is made up of representatives of many diverse groups who have an interest of one sort or another in conservation. It serves as a forum for the discussion of diverse (and sometimes conflicting) interests, has prepared reports on many topics such as land use, pollution, etc. and has made representations to government at all levels. Through the early period of the Council's history these activities were to a great extent originated and guided by Mr. Kortright.

Mr. Kortright married the former Yvonne Galt in 1916. He is the son of an Engineer and his own son, L. H. G. Kortright is a 4T0 Chemical Engineer graduate of the U. of T. In the continuation of an excellent tradition, his grandson, R. W. S. Kortright, will enroll in Engineering Science in the Fall of 1971.

*continued on page 4*

Mr. McQueen was born in England and served in France with The Canadian Expeditionary Force in the First World War. On return to Canada he entered the University of Toronto and graduated in 1923 with honours in Engineering. In 1932 he obtained the C.E. degree from the University of Toronto.

Mr. McQueen is an engineer of world renown in the field of hydro-electric power generation. For the 41 years of his active professional life he was associated with the firm of H. G. Acres and Company, Limited of Niagara Falls, Ontario. In his association with this firm he rose from the position of Assistant Engineer in 1927 to that of President in 1956 and Chairman of the Board in 1960. In 1962 Mr. McQueen assumed the presidency of Caseco Consultants Limited, Vancouver, and although continuing his association with Acres he devoted all of his efforts during the years 1962 to 1968 to one of the world's great engineering developments, the Mica Project.

In the development of Canada's natural resources there have been few records as impressive as the exploitation of the country's energy resources. From small beginnings at the turn of the century to the huge hydro-electric projects of recent years, Canada has been among the world's leaders. Such achievements depended upon and produced a relatively small group of outstanding Canadian engineers who have pioneered, and combined their contributions in the development of their art and the common good. Mr. McQueen is an outstanding member of this select group.

Mr. McQueen was an early advocate of the comprehensive development of the power potential of entire river basins, and he successfully applied this concept to studies of the Winnipeg River in Manitoba and the Campbell River in British Columbia. He has contributed greatly to the world-wide activities and reputation of H. G. Acres. These activities have put Canada in the forefront in hydro-electric power generation throughout the world.

Throughout his career Mr. McQueen maintained a keen interest in the education and development of engineers. For his paper in 1932 on "Engineering Education in Canada" he was awarded the Past-Presidents' Prize of the Engineering Institute of Canada. He was professionally active in the Engineering Institute of Canada and the Association of Professional Engineers of Ontario. In the former he was a branch chairman and later a councillor. In the latter he occupied positions of councillor, vice-president and president.

The awarding of an Honorary Doctor of Engineering degree to this distinguished alumnus of the University of Toronto is a recognition of his ability and contributions in the field of Engineering.

Mr. McQueen's publications include:

"Engineering Education in Canada"
The Engineering Journal, May 1932

"Water Hammer and Surge Tanks"
Journal of the American Waterworks Association, August 1932

"Hydraulic Stability"
The Engineering Journal, January 1933

"The 18-Foot Diameter Steel Pipeline at Outardes Falls, Quebec"
The Engineering Journal, April 1938
(Co-author: E. C. Molke)

*continued on page 4*

# S.P.S. CENTENNIAL CELEBRATION

On March 29, 1873, Royal assent was given to an act to establish a School of Practical Science at Toronto. In 1973, in recognition of 100 years of Engineering growth, the Faculty and Alumni will celebrate this significant achievement. President Claude Bissel has appointed Dean James Ham to form a Committee to organize the activities associated with the Centenary.

The objective of the Centenary will be to celebrate the past and exalt the present and future. Firm plans have not been developed, but possible activities include: an update of S.P.S. history; a series of seminar sessions; honour lists and a who's who of graduates and faculty; and recognition of academic and technical achievements of the Faculty. Other contemplated activities include a special Engineering Convocation, honorary degree awards, and centennial scholarships and prizes.

The Committee would welcome and indeed require support from the Alumni and we ask that any ideas or suggestions be forwarded to the S.P.S. Centenary, c/o Alumni House, University of Toronto, Toronto. We will continue to keep you informed on activities as they are developed and hope that all Alumni will become involved in this unique celebration.

CELEBRATING S.P.S. 100th BIRTHDAY

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## FIRST WOMAN CHANCELLOR SELECTED

MRS. PAULINE MILLS McGIBBON

Pauline Mills McGibbon, Vic '33 (B.A. in Modern History), LL.D. '67 (University of Alberta), is Chancellor-Elect of University of Toronto. She will succeed Dr. O. M. Solandt who, by statute, must retire when his second three-year term expires June 30.

Dr. McGibbon was chosen by the Committee of Election which consists of the President of the University of Toronto Alumni Association and the fifty members of Senate elected by their alumni constituencies.

Dr. McGibbon will be the first woman to hold the office of Chancellor at the University of Toronto. She will become the second woman to be a member of the Board of Governors, joining Mrs. W. H. Clarke. In addition to presiding at important University functions and conferring all degrees, the Chancellor, like the President, is a Governor *ex officio*.

Born in Sarnia, Dr. McGibbon is the wife of Donald W. McGibbon, Vic '32, treasurer of Imperial Oil Limited and a member of the executive committee, Varsity Fund Board of Directors. Husband and wife have been deeply involved in the life of the University, particularly in alumni affairs, for many years.

Dr. McGibbon is Chairman of the Board of Governors, Women's College Hospital. She has an enormous capacity for service in the arts, in education and the advancement of good citizenship and is an excellent selection for this important post.

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## U OF T TO AWARD HONORARY DEGREES TO ENGINEERING ALUMNI

**FRANCIS HERBERT KORTRIGHT** *continued from page 3*

General appreciation of his role as a conservationist is shown by the awards he has received. These include:

Honorary Award, Eugene Field Society, 1944.
Honorary Award, Outdoor Writers of Canada, 1947.
Nash Conservation Award, 1954.
Province of Ontario Achievement Award, 1960.
Honorary Award of the Water Resources Commission of Ontario, 1960.

He has been made an honorary life member of the Audubon Society, the Soil Conservation Society of America and the Outdoor Writers of America.

Finally, as a physical tribute to him the Kortright Waterfowl Park was dedicated to him in 1965.

Few men of his generation have devoted more time, thought and energy to conservation matters in Canada and few indeed have made so great a contribution.

**ANDREW WILLIAM FRASER McQUEEN** *continued from page 3*

"Soil Mechanics at the Shand Dam"
  The Engineering Journal, April 1940
  (Co-author: R. C. McMordie)

"Seine River Diversion at Steep Rock"
  The Engineering Journal, January-December 1945
  (Co-author: C. N. Simpson)

"Underground Power Plants in Canada"
  Proceedings of The American Society of Civil Engineers,
  June 1958 (Co-authors: C. N. Simpson and I. W. McCaig)

"Power and Canada"
  Engineering Institute of Canada
  Second Southern Ontario Regional Conference
  Hamilton, Ontario, March 1959

His professional associations include:

Association of Professional Engineers of Ontario
  President — 1959 (Life Member)

Association of Professional Engineers of British Columbia
  (Life Member)

Engineering Institute of Canada
  Past Chairman of the Niagara Peninsula Branch,
  and Past Councillor of the Institute (Fellow)

American Society of Civil Engineers
  (Fellow)

International Association for Hydraulic Research
  (Member)

Canadian National Committee of the International
Commission on Large Dams (Member)

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## "MISS PURITY" GOES TO WASHINGTON FEATURED AT WORLD FILM PREVIEW

The National Air Pollution Control Administration (U.S.A.) invited the U of T clean air research vehicle "Miss Purity" to appear at the second International Clean Air Congress in Washington D.C., December 6 to 11.

Miss Purity was featured at the world premiere of the film "Great Clean Car Race of 1970" and at the opening plenary session. She was on display during the entire Congress and drew the interest of delegates from all parts of the world.